ABSTRACT

A biasing circuit for biasing a device (e.g., a GaAs field effect transistor) used for amplifying a radio frequency (RF) signal, the biasing circuit including an active element in series with a resistor, the active element providing a relatively low impedance over a bandwidth comparable to an amplitude modulation bandwidth of the RF signal, such that a DC bias voltage applied at the active element has a fixed DC voltage at the resistor input, i.e., without any memory effect, thereby allowing for improved predistortion compensation of non-linear voltage of the RF signal.